Additional information on geology, seismicity, landslides and other geologic hazards can be found in the Safety Element of the county general plan.

Slope Characteristics

Steep slopes are a limiting factor for almost all types of land use. They also have a pronounced effect on other natural conditions such as the type and amount of vegetation, the propensity toward soil erosion, and the rate of surface water runoff.

The Natural Resources Conservation Service provides a general description of how slopes can affect land uses. In general, agricultural crops experience moderate limitations when slopes exceed 10 percent, however, there are some crops that can be effectively produced on steeper slopes of 30 percent or more. Depending on soil characteristics, grassland used for grazing purposes may have moderate limitations above 30 percent. Slopes above 50 percent place a severe limitation on grazing, although appropriate management practices can reduce impacts. Development requiring road cuts, building pads and septic systems are best suited to slopes under 20 percent. Major problems, including the unsightly appearance of scarred hillsides and streams chocked with sediment and eroded debris, increase with steeper slopes.

The prevalence of rolling or mountainous terrain places approximately 60 percent of the county into the slope range of 30 percent or greater. Another 23 percent occupies slopes ranging from 10 to 30 percent, leaving only about 17 percent of the total county land area with level to gently sloping terrain on slopes of less than 10 percent.

With so little gentle land, there is oftentimes considerable competition for land on slopes less than 15 percent. This can be a major land use problem if it results in an inefficient use of land resources. This is particularly the case when the best agricultural land lying within fertile valley deltas is sacrificed in favor of urban expansion.

The generalized slope characteristics of the county are shown in three categories in Figure 3-2: 0-15 percent; 15-30 percent; and greater than 30 percent. These categories correspond to the categories typically used in the Land Use Ordinance for review of development projects.

BIOLOGICAL RESOURCES

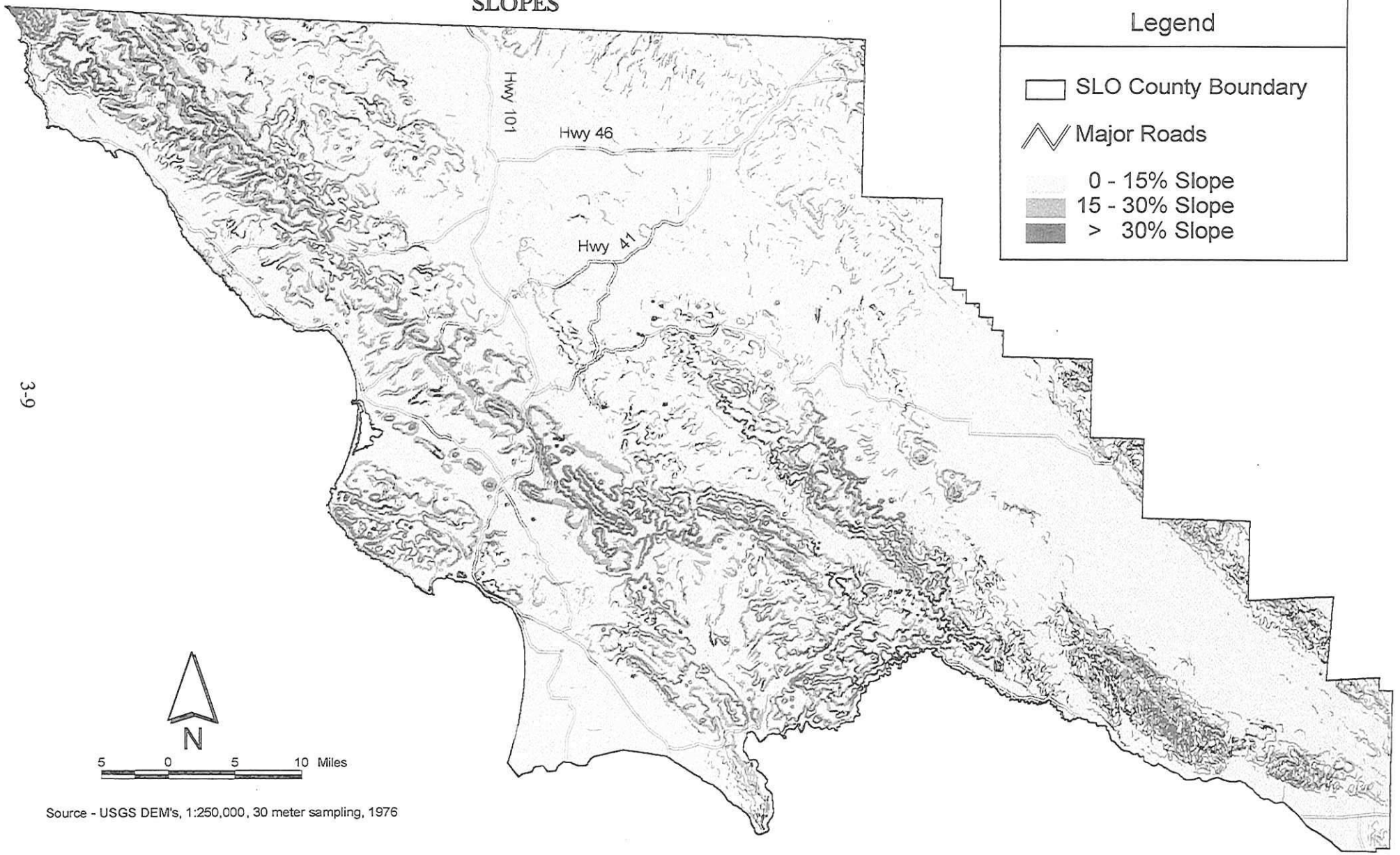
San Luis Obispo County has many significant biological features. These are defined as plant or animal species of rare and/or endangered status, depleted or declining species, and species or habitat types of limited distribution such as wetlands. There are also many distinct vegetation and wildlife habitat communities. Many, but not all, of these important biological resources are included within Sensitive Resource Area (SRA) combining designations (overlays) in the Land Use

SAN LUIS OBISPO COUNTY DEPARTMENT OF PLANNING AND BUILDING

AGRICULTURE AND OPEN SPACE ELEMENT

Figure 3-2

SLOPES



Source - USGS DEM's, 1:250,000, 30 meter sampling, 1976

Element. The SRA's are areas of the county with special environmental qualities, or areas containing unique or endangered vegetation or habitat resources. Where this Agriculture and Open Space Element identifies resources that are not designated as SRA's by the Land Use Element, follow-up advertised public hearings will be necessary before an SRA overlay may be applied to those lands.

There are a number of rare, threatened, and endangered species known to occur in the county. Other, as yet unidentified, special status species may occur in the county. Figure 3-3 summarizes available information as of 1996. The reader may wish to consult the California Natural Diversity Database (CNDDB) list and map of reported species locations for more detailed information (available through the Environmental Division of the county Department of Planning and Building).

Regional Habitat Characteristics

There are a number of important types of habitat in the county that take on a regional character. These include:

* **The Nipomo Dunes**. This national natural landmark located south of Point Buchon is host to a large number of endemic and rare plant species, as well as dune uplands lakes and wetlands.

* **Estuaries**. Estuaries are a notable feature of the coastal areas, occurring wherever flowing streams meet the ocean. They are the nursery for the local fisheries along the coastline. Morro Bay contains the region's largest estuary, with a saltwater marsh located on the east side where Chorro and Los Osos creeks enter the bay. This is one of the most significant wetlands remaining on the California coast, providing nesting habitat for blue herons, cranes and other important species of woodland birds and wildlife. Morro Bay estuary is also a designated state and national estuary. Smaller coastal lagoons and marshes are also scattered along the shoreline.

* **The Upper Salinas River Valley**. This area is characterized by a variety of vegetation communities including riparian, oak woodlands, wetlands, native and non-native grasslands, and chaparral. Coast Live Oak and Blue Oak are dominant features of the landscape, with a variety of wildlife supported by the oak woodlands scattered throughout the area. Riparian trees such as sycamores, cottonwoods and willows are common along drainage channels, streams, reservoirs, and marshes. Grassland vegetation is widespread on the rolling hills and flat areas that are either too dry to support oak woodland or have been cleared of oaks in the past.

State & Federally Listed Animal Species in San Luis Obispo County (August 1996)

Name	Habitat	State Status	Federal Status
California gray whale (*Eschrichtius robustus*)	Open & near-coastal ocean	none	Endangered
giant kangaroo rat (*Dipodomys ingens*)	(Same as San Joaquin kit fox)	Endangered	Endangered
Morro Bay kangaroo rat (*Dipodomys heermanii* ssp. *morroensis*)	Coastal scrub	Endangered	Endangered
San Joaquin antelope squirrel (*Ammospermophilus nelsoni*)	(Same as San Joaquin kit fox)	Threatened	none
San Joaquin kit fox (*Vulpes macrotis*)	Valley sink scrub, valley saltbush scrub, valley & foothill grassland	Threatened	Endangered
Southern sea otter (*Enhydra lutris*)	Near-coastal ocean	none	Threatened
bald eagle (*Haliaeetus leucocephalus*)	Lakes	Endangered	Threatened
California black rail (*Laterallus jamaicensis*)	Salt water marsh	Threatened	none
California brown pelican (*Pelecanus occidentalis californicus*)	Open & near-coastal ocean	Endangered	Endangered
California clapper rail (*Rallus longirostris obsoletus*)	Salt water marsh	Endangered	Endangered
California condor (*Gymnogyps californianus*)	Variety of habitats - eastern county	Endangered	Endangered
California least tern (*Sterna albifrons browni*)	Near-coastal ocean, coastal dunes	Endangered	Endangered
peregrine falcon (*Falco peregrinus anatum*)	Variety of habitats; mostly coastal	Endangered	Endangered
southwestern willow flycatcher (*Empidonax trailii extimus*)	Arroyo willow riparian forest	Endangered	Endangered
western snowy plover (*Charadrius alexandrinus*)	Near-coastal ocean, coastal dunes	none	Threatened
blunt-nosed leopard lizard (*Gambelia silus*)	(Same as San Joaquin kit fox)	Endangered	Endangered
California red-legged frog (*Rana aurora draytonii*)	Riparian woodlands, freshwater marsh	none	Threatened
green sea turtle (*Chelonia mydas*)	Open ocean	none	Threatened
leatherback sea turtle (*Dermochelys coriacea*)	Open ocean	none	Endangered
olive (Pacific) Ridley sea turtle (*Lepidochelys olivacea*)	Open ocean	none	Threatened
tidewater goby (*Eucyclogobius newberryi*)	Coastal brackish marsh	none	Endangered
Morro shoulderband (*Helminthoglypta walkeriana*)	Central dune scrub	none	Endangered

Figure 3-3

Figure 3-3 (Continued)

State & Federally Listed Plant Species in San Luis Obispo County (August 1996)

Name	Habitat	State Status	Federal Status
adobe sanicle (*Sanicula maritima*)	Central maritime chaparral, valley needlegrass grassland	Rare	none
beach spectacle pod (*Dithyrea maritima*)	Central foredunes	Threatened	none
California jewelflower (*Caulanthus californicus*)	Valley saltbush scrub	Endangered	Endangered
California seablite (*Suaeda californica*)	Salt water marsh	none	Endangered
Camatta Canyon amole (*Chlorogalum purpureum* var. *reductum*)	Cismontane woodland	Rare	Candidate
Chorro Creek bog thistle (*Cirsium fontinale* var. *obispoense*)	Freshwater seep	Endangered	Endangered
Cuesta Pass checkerbloom (*Sidalcea hickmanii* ssp. *anomala*)	Closed-cone coniferous forest	Rare	none
Dudley's lousewort (*Pedicularis dudleyi*)	Central maritime chaparral	Rare	none
Dwarf goldenstar (*Bloomeria humilis*)	Coastal bluff scrub	Rare	none
Gambel's watercress (*Rorippa gambellii*)	Coastal & valley freshwater marsh	Threatened	Endangered
Hearst's ceanothus (*Ceanothus hearstiorum*)	Central maritime chaparral	Rare	none
Hearst's manzanita (*Arctostaphylos hookeri* ssp. *hearstiorum*)	Central maritime chaparral	Endangered	none
Indian Knob mountain balm (*Eriodictyon altissimum*)	Central maritime chaparral	Endangered	Endangered
La Graciosa thistle (*Cirsium loncholepis*)	Central foredunes	Threatened	Candidate
maritime ceanothus (*Ceanothus maritimus*)	Central maritime chaparral	Rare	none
Marsh sandwort (*Arenaria paludicola*)	Coastal & valley freshwater marsh	Endangered	Endangered
Morro manzanita (*Arctostaphylos morroensis*)	Central maritime chaparral	PE	Threatened
Nipomo lupine (*Lupinus nipomoensis*)	Central dune scrub	Endangered	Candidate
Pismo clarkia (*Clarkia speciosa* ssp. *immaculata*)	Chaparral, coast live oak woodland, valley needlegrass grassland	Rare	Endangered
salt marsh bird's beak (*Cordylanthus maritimus* ssp. *maritimus*)	Salt water marsh	Endangered	Endangered
surf thistle (*Cirsium rhothophilum*)	Coastal bluff scrub, central foredunes	Threatened	Candidate

* **The Carrizo Plain**. This basin in the east county is a dry salt lake with alkali flats and saltbush-scrub as the principal vegetation. The upland areas are characteristic of an arid prairie, with little vegetation except dry grass. This region is best described as a steppe - a dry grass-covered area with wide temperature fluctuations.

* **Coastal Streams**. Coastal streams (perennial and intermittent) are environmentally sensitive habitat areas. Several coastal streams may support steelhead trout during periods of sufficient flow. Steelhead trout are anadromous rainbow trout that return to spawn in freshwater streams during the spring. This species is an important fishery resource along the entire west coast and has recently been listed as "threatened" by the National Marine Fisheries Service. The biggest threat to this species is due to damming of coastal streams, however, they are also threatened by low instream flows resulting from water diversion and groundwater pumping, and water quality degradation due to erosion.

Major Vegetative Communities

The wide variety of vegetation types add immeasurable beauty to the county's landscape, whether it be the oak studded hillsides, pines along a mountain ridge, or lush willows along the streams. In addition to the beauty, plants are a vital part of the ecosystem: shelter for wildlife; cleansing the air; preventing soil erosion and water pollution; and as food for man and animals. As the **Conservation Element** notes in its discussion of plant conservation, "it is important for these indispensable values of plants to be recognized..." and that the county "...must take action to halt the continued destruction of this vital resource."

In 1994, the State Department of Forestry and Fire Protection published "California Hardwood Rangeland Monitoring Final Report." This report further refined the mapping of vegetation in the county based on satellite imagery (a copy of that map is available for review in the county Department of Planning and Building). Figure 3-4 lists the acreages of the various types of vegetative cover as shown on Figure 3-5 below.

FIGURE 3-4
VEGETATIVE COVER OF SAN LUIS OBISPO COUNTY

Type	Approximate Acreage
Blue Oak Woodland	352,000
Blue Oak - Grey Pine	80,000
Valley Oak Woodland	8,000
Coastal Oak Woodland	359,000
Montane Hardwood	6,800
Conifer	8,200
Shrub (chaparral)	329,700
Grassland	917,500

Source: "California Hardwood Rangeland Monitoring Final Report," Strategic Planning Program, California Department of Forestry and Fire Protection, July 7, 1994.

A generalized vegetation map of the county, obtained through the Teale Data Center in Sacramento, is shown in Figure 3-5. While the categories do not exactly match the 1994 mapping cited above, the map is useful for providing a sense of the types of vegetation found in the county.

Habitat Type

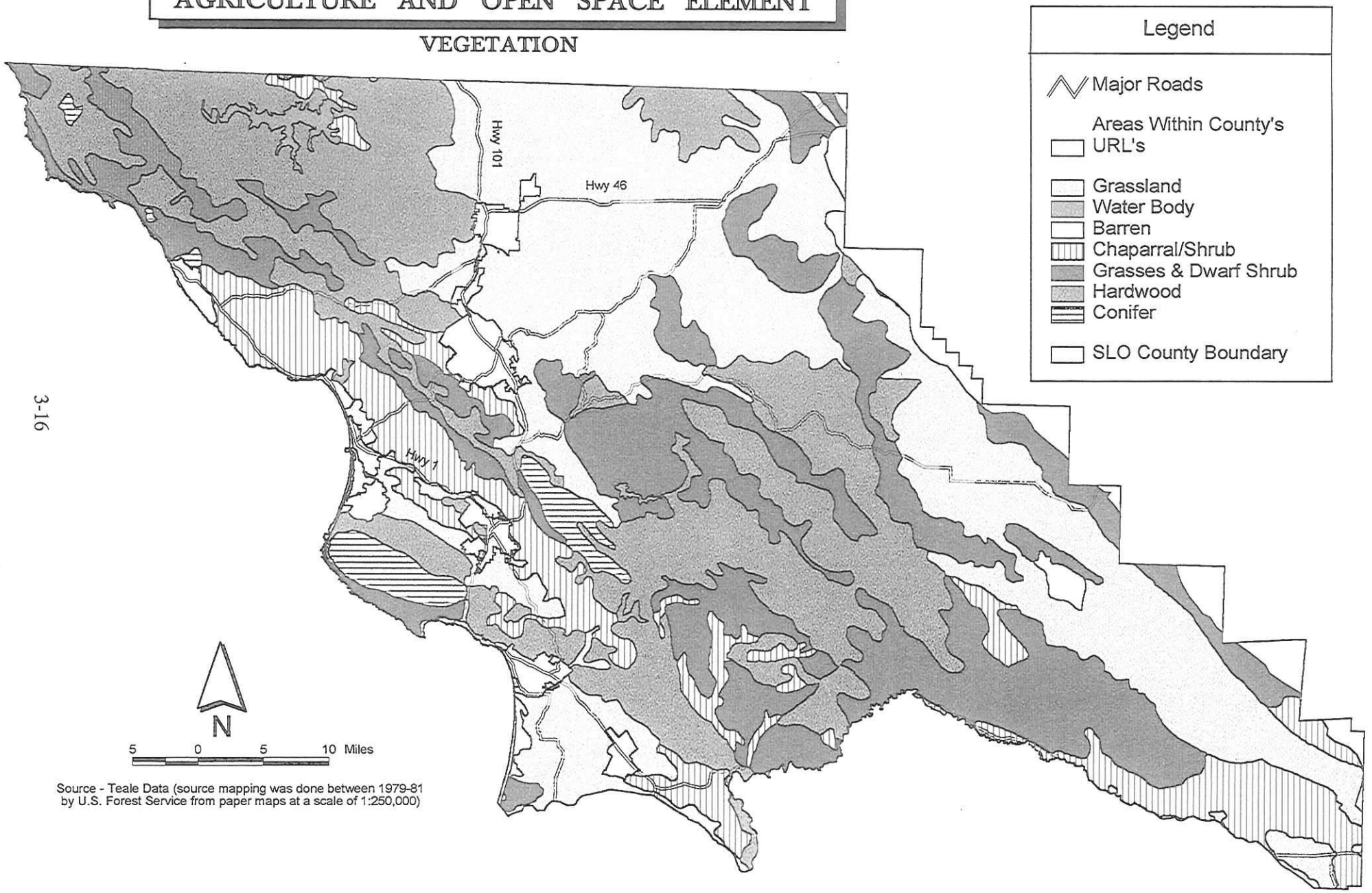
In the early 1980's, the California Wildlife-Habitat Relationships (WHR) System was developed as a standardized methodology for identifying and assessing wildlife and habitat relationships. In 1988, the state published "A Guide to Wildlife Habitats of California" (Kenneth E. Mayer and Wm. F. Landenslayer, editors), which contains a detailed description of the 19 different types of wildlife habitats that constitute the WHR classification system. The following is a brief description of the various habitat types found in San Luis Obispo County.

SAN LUIS OBISPO COUNTY DEPARTMENT OF PLANNING AND BUILDING

AGRICULTURE AND OPEN SPACE ELEMENT

VEGETATION

Figure 3-5



Source - Teale Data (source mapping was done between 1979-81 by U.S. Forest Service from paper maps at a scale of 1:250,000)

Oak Woodlands

Based on the acreages listed in Figure 3-4, oak woodlands cover more than 36 percent of the total land area of the county. This habitat type is a major component of the rural landscape of the county.

Throughout California, oak woodlands in general are considered sensitive habitat primarily due to their limited acreage, high wildlife value, gradual loss as a result of development, and lack of regeneration. Over time, oak dominated woodlands have been degraded by urban and rural residential development, livestock, and the expansion of agriculture. In most areas, the understory cover is either lacking or is composed primarily of non-native species. Oak woodlands in San Luis Obispo County have experienced many of the same impacts over the years. The following is a description of the various types of oak woodlands.

Valley Oak Woodland

This habitat occurs in a wide range of settings, but is best developed on deep, well drained alluvial soils usually in valley bottoms, and on non-alluvial soils in the coast ranges. Valley oak woodland varies from savanna-like to forest-like stands with partially closed canopies, with a grassy understory. Individual trees may reach 115 feet in height. Valley oak woodland intermixes with valley oak riparian forest near rivers and with blue oak woodland in drier locations. These woodlands provide important food and cover for many species of wildlife.

Blue Oak Woodland

Blue oak woodlands are usually associated with shallow, rocky, infertile, well-drained soils. Blue oaks are well adapted to dry, hilly terrain where the water table is usually unavailable. Blue oak woodland intergrades with valley oak woodland, but generally occurs on drier slopes. This habitat varies in structure from open savanna to dense woodland and is typically found in the valleys and foothills of the coast ranges. Typical understory is composed of an extension of Annual Grassland vegetation.

Blue Oak-Grey Pine

This habitat is typically diverse, with a mix of hardwoods, conifer, and shrubs. Associated species are the coast live oak and valley oak. Soils are generally well drained materials, ranging from gravelly loam through stony clay loam, and are typically rich in rock fragments. Most mature stands of this type have a canopy closure that can range up to 59 percent, and generally have small accumulations of dead and downed woody material and relatively few snags compared to other tree habitats. Concern has been expressed for the long-term existence of this habitat because there has been little regeneration since the late 1800's due to the seedlings and yearly acorn crop being eaten by livestock, deer, birds, insects and rodents.

Coastal Oak Woodlands

These woodlands are extremely variable. They are known to exist on over 15 different types of soils in the county, generally occurring on moderately to well drained soils that are moderately deep and have low to medium fertility. The overstory consists of deciduous and evergreen hardwoods, mostly oaks, up to 70 feet in height. The understory can vary from shrubs that are dense and almost impenetrable, to more scattered under and between trees, to grasslands where the trees are scattered to form an open woodland. Most coastal oak woodlands are comprised of medium to large trees with few seedlings and saplings, especially in heavily grazed areas.

These woodlands are comprised of slow growing, long-lived trees, so succession requires a long time. Regeneration of most oaks in coastal oak woodlands have not been thoroughly studied, but they are generally thought to not have the serious regeneration problems found in blue oak and valley oak. Coastal oak woodlands provide habitat for a large variety of wildlife species, up to as many as 110 species of birds observed during the breeding season in California habitats where oaks form a significant part of the canopy or subcanopy. The continuing loss of coastal oak woodland habitat is a significant concern.

Montane Hardwood

A typical montane hardwood habitat is composed of a pronounced hardwood tree layer, with poorly developed shrub and herbaceous layers. On better sites the trees may be only three feet apart, while on poorer sites the spacing may be as much as over 30 feet, with individual tree heights ranging from 50 to nearly 100 feet. Canyon live oak often form pure stands on steep canyon slopes and rocky ridgetops, but can be found on a wide range of slopes ranging from moderate to steep. Soils are for the most part rocky, alluvial, coarse textured, poorly developed and well drained. This habitat is characterized by bird and animal species that include both disseminators of acorns, as well as species that depend on acorns as a food source.

Conifer

True coniferous forest is rare in San Luis Obispo County. These evergreens are irregular in location and are usually rather small in area. However, there are several stands that can be considered true coniferous forest, including the Cambria Pine forest on the North Coast, Ponderosa Pines on Pine Mountain above San Simeon, Bishop Pines south of Coon Creek in the San Luis Range, Knobcone Pine mixed to a limited extent with Coulter Pine southeast of Cuesta Pass, and some Sargent Cypress with scattered Coulter Pines northwest of Cuesta Pass. Typically, the trees are closely spaced but may be more scattered when mixed with other species.

Shrub (chaparral)
This habitat is characterized as mixed chaparral. Chaparral is a sort of catch-all that describes a wide variety of closely crowded shrubs with thick, stiff heavy evergreen leaves. The habitat extends throughout the county, from near the coastline to the La Panza Range on the eastern border of the county. Shrub height and crown cover can vary widely, depending on age since the last burn, rainfall, slope, orientation and soil types. Mixed chaparral can support a wide variety of woody plants, including scrub oak, chaparral oak, several species of ceanothus, manzanita, toyon and others. There are no wildlife species restricted to chaparral habitat.

Grassland
Grasslands in San Luis Obispo County are generally composed of introduced annual grasses. These introduced species occupy what was once a pristine native grassland. However, small, scattered patches of native grasslands may still exist. Grasslands occur as understory plants in valley oak woodland and other habitats. This habitat provides important foraging, denning, and nesting opportunities for a variety of wildlife species.

Eucalyptus Woodland
Eucalyptus woodland is typically represented by dense stands of gum trees, commonly referred to as eucalyptus, that were originally imported primarily from Australia. The trees were originally planted in groves throughout many regions of coastal California as a potential source of lumber and building materials and for their use as windbreaks. They have increased their cover through natural regeneration, particularly in moist areas sheltered from strong coastal winds. Where the trees exist in dense stands, they tend to completely supplant native vegetation, greatly altering community structure and dynamics. Very few native plant species are compatible with eucalyptus.

Riparian Forest
Riparian forest lands can take one of two forms on the central coast. One is an open, low riparian forest dominated by coast live oak. This association occurs on drier, slightly elevated floodplains along perennial streams, and typically occupies a transitional zone between more moist cottonwood or willow-dominated communities and the more dry chaparral vegetation types.

A second type of riparian forest is the cottonwood-sycamore riparian forest. This is a habitat dominated by western sycamore, cottonwood, and valley oak. This association typically occupies course soils of the floodplains of low velocity streams. Cover is nearly complete and a dense thicket of shrubs may form in the understory. This habitat is found in canyons and creeks throughout the coastal area.

Coastal Saltmarsh

This is a wetland plant community comprised of salt tolerant species, reaching approximately three feet in height and forming moderate to dense cover. This association occupies sheltered inland margins of bays, lagoons, and estuaries subject to tidal inundation. Extensive areas of this habitat occur around Morro Bay.

C. OPEN SPACE ISSUES

One of the tasks of the Rural Settlement Study Phase I Report (see discussion in Chapter 1) was to evaluate the potential environmental effects of historical development activities as well as the projections of the general plan. This was done, in part, by comparing development activity to those areas of the county covered by Sensitive Resource Area (SRA) combining designations. The report also looked at a number of other resources, both natural and cultural, including: public ownership such as forests and parks; the Highway 101 viewshed corridor; the habitat of rare plant and animal species; surface water (lakes); and oak woodlands. The location of these resources, in addition to the agricultural and sensitive resource areas, were then mapped to see if there was a concentrated pattern of important natural resources within the county and what effects rural development might have had on those resources.

Several important findings came out of that evaluation, including:

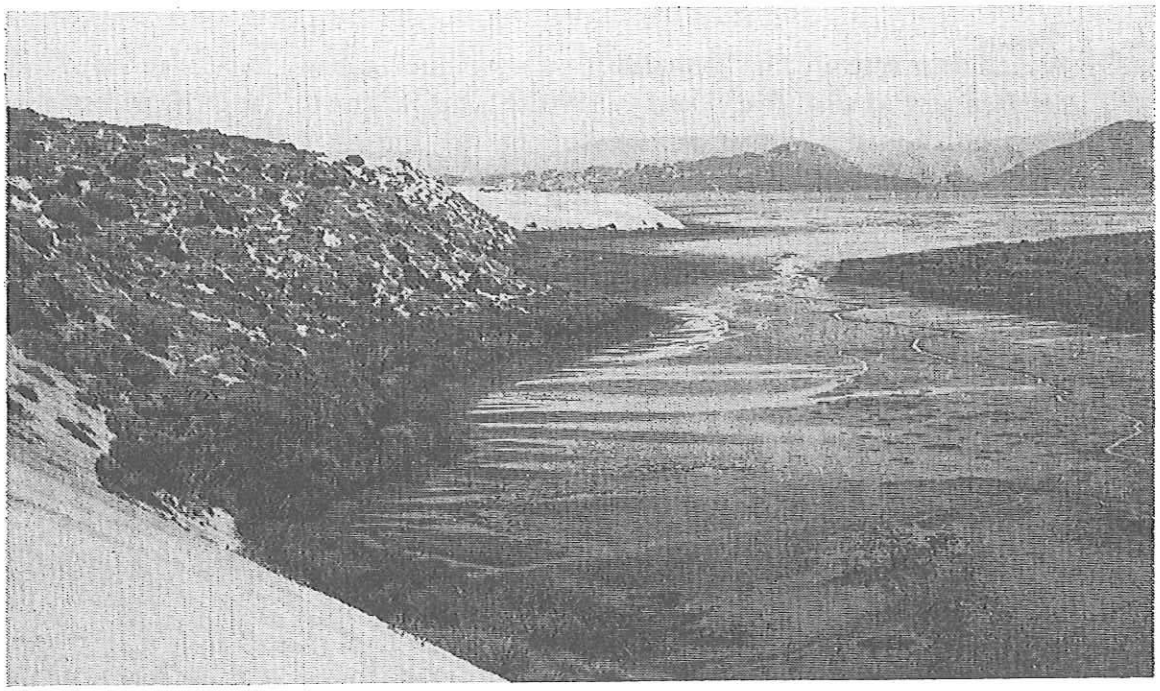
* about 30 percent of the areas where two or more of these resources were found to exist have been affected by development;

* the relatively low level of impact which has occurred can be attributed to the county's underlying topography; most of the resources are found in the mountainous terrain that has historically experienced less development pressure but that can change as development moves into the more rural locations;

* subdivision of the land through parcel and tract maps will have the greatest continuing effect on the environmental resources of the rural areas;

* the rural character of the county will be increasingly affected by the smaller lot sizes resulting from new land divisions; and

* the pattern of subdivisions moving into the rural areas containing these resources will lead to increasing conflicts.



What are the Issues Affecting Open Space Lands?

* **Population growth creates pressure to convert lands containing open space resources to non-open space uses.**

  Lands with open space resources are experiencing increased pressure for development that can be detrimental to the resources due to grading and land alteration that result in alterations of biosystems and destruction of habitat.

* **Increased population in the rural areas increases the conflicts between humans and the natural systems.**

  Suburban and rural residential development increases the level of human activity in rural areas. This can cause serious damage to or loss of habitat that is necessary for the long-term protection of plant and animal species. The introduction of domestic pets can be particularly harmful to wildlife. Increased development also brings the introduction of invasive non-native plant species into the rural landscape.

* **Rural development fragments habitat.**

  As habitat is fractured and reduced in size, wildlife's ability to survive is reduced. The displacement of wildlife can lead to increased competition for the basic necessities of life: food, cover, water and space. In the long run, habitat fragmentation will result in a decline in the diversity and number of species.

* **Land use decisions often treat conservation and economics as two mutually exclusive considerations.**

  Decisions about the open space resources that may be located on a given piece of land are often made when there is a crisis - significant monetary resources have already been invested in the property but the open space resources have already been seriously degraded. The consequences of crisis-driven conservation efforts can often be comparable to those of actually exhausting the resources that are trying to be conserved. A new decision making process needs to be implemented that manages land simultaneously as an ecological system and as an economic resource.

* **Although the county contains an abundance of open space, it is not evenly distributed, or it may not be easily accessible where multiple uses could be made of the resource.**

  Over 25 percent of the county land areas is under some form of public ownership. While there may be multiple uses of those publicly owned areas, much of that land can be considered to be open space.

  A majority of our population lives in the relatively urbanized coastal areas and along the Highway 101 corridor and must often travel some distances to enjoy the large open areas. The County Park and Recreation Master Plan has identified existing and future shortages of recreational land in several areas throughout the county, but especially in or near these urban corridors.

Publicly owned lands may provide several open space functions such as recreation and protection of habitat, watershed and scenic resources, but those can often be competing functions. The competition between those uses may also spill over to adjacent privately owned lands. This will require careful planning and coordination between public agencies and private land owners to ensure that conflicts are avoided or minimized as much as possible.

Why Protect Open Space?

Open space should be protected because:

* **Open space lands contribute to a high quality of life and make our communities more livable.**

  Our lives are enriched by experiencing nature in an undeveloped state, within both urban and rural areas. As population increases and more people come to the county to experience its recreational and tourism opportunities, the more challenging it becomes to try to maintain the open space that draws them here.

* **Open space protects environmental resources such as important ecosystems and natural communities, and rare and endangered species of plants and animals.**

  As population increases, there is ever-increasing pressure to convert open space lands to non-open space uses. With this conversion comes the loss of habitat, which in turn brings a decline in the number and diversity of species. Protecting open space habitats now can reduce the need to argue over protection of rare or endangered species later.

* **Open space retains land that could be made available for future production of resources.**

  Many open space areas are also rich in resources that can meet the needs of future generations. Production of those resources is important to San Luis Obispo County, as well as on a statewide basis. There are open space areas that contain mineral and aggregate resources. The challenge is to make wise use of those resources while keeping the important open space attributes.

* **Open space defines the identity of our communities and protects the rural character of our county.**

  The open areas that surround many of our communities provide visual relief from continuous urbanization, prevent urban sprawl and create the character of the county's landscape that makes it special to residents and visitors.

* **Open space provides a buffer between conflicting land uses.**

  Open space areas help define the difference between urban and rural areas. It also provides separation between uses that might be incompatible, thereby allowing incompatible uses to coexist.

* **Open space protects public health and safety by identifying lands, such as floodplains and unstable slopes, that may be hazardous for development.**

  Maintaining open space on lands that are hazardous for development, such as floodplains and unstable slopes, protects the health, safety and welfare of both new and existing residents. It also avoids public costs of paying for property and other damage resulting from disasters such as floods, fires, landslides and earthquakes.

* **Open space protects the natural scenic beauty of the county.**

  Scenic and sensitive features, such as the Morros, the Morro Bay estaury and wetlands, the coastal dune systems, the vast open expanses of the Carrizo Planning Natural Area, or the ecologically significant coastal streams all contribute to the high scenic quality of the county. These areas give strong definition to the overall character of the county, thereby adding to the quality of life enjoyed by residents and visitors alike. Protection of scenic resources also encourages the growth of the recreation and tourism industries, which are important components of the county economy.

* **Open space provides opportunities for educational and scientific research, including the possible discovery of new medicines, or the development of new management strategies or technologies to better preserve our resources for future generations.**

  Natural systems have provided the basis for many of the medicines on which mankind depends. Preservation of our natural systems provides the opportunities for future discoveries. As we study the resources, we hope we can find better ways to preserve them, while still making appropriate use of the resources. Loss of our open space resources eliminates of reduces our options for the future.

* **Open space preserves the history and heritage of our county.**

  Preserving open space can mean protecting archaeological, cultural and historic resources such as sacred sites used by Native Americans for thousands of years.

It is not possible to have a single solution to such a wide-ranging list of issues affecting open space resources. And in many instances, the solutions may not be only local. Just as is the case for agricultural issues, many of the issues affecting open space resources may only be resolved through policies at the state and national level. However, it is important that the county have a clear statement of it open space land use policies in order to protect and conserve these resources for the future.

D. OPEN SPACE GOALS, POLICIES, IMPLEMENTATION MEASURES AND PROGRAMS

INTENT

It is the intent of San Luis Obispo County to conserve and protect open space resources in the unincorporated areas of the county. This can be done by:

1. Identifying open space lands that contain important resources that have unique characteristics and features, and clearly defining how the protection of those resources can be balanced with the needs of agriculture when the resources are located on or adjacent to agricultural lands; and

2. Developing effective management policies for the protection and enhancement of public lands that contain open space resources; and

3. Establishing land use policies that effectively define the boundaries between developed communities and surrounding rural countryside; and

4. Encouraging on-going public awareness of, and participation in, the development of policies for the conservation of open space resources.

Open space lands described in this element are resources or features of the landscape with unique or sensitive habitat for plants and animals; recreational opportunities; distinctive scenic values; hazards that threaten public health and safety; or archeological or historical sites. Because open space resources do not observe man-made boundaries, they occur on both public and private lands. Therefore, the following goals and policies in this Open Space Element refer to the treatment of open space resources on public lands and on private non-agricultural lands. Agricultural Element policies AGP26 - AGP35 deal with the treatment of open space resources on agricultural lands.

OPEN SPACE GOALS (OSG)

OSG1: Identify and Protect Open Space.

a. Identify, protect, sustain, and, where necessary, restore and reclaim areas with the following characteristics:

1. Recreation areas

2. Ecosystems and environmentally sensitive resources such as:

(a) Natural Area Preserves

(b) Streams and riparian vegetation

(c) Unique, sensitive habitat; natural communities
(d) Significant marine resources.

3. Archaeological, cultural, and historical resources
4. Scenic areas
5. Hazard areas
6. Rural character

OSG2: Manage Open Space.

a. Manage public open space lands so as to place a high priority on protecting and sustaining open space resources.

b. Provide voluntary incentives to encourage private landowners to maintain and protect open space resources on their land.

c. Coordinate planning and actions with the various public agencies involved in open space protection and management, including the cities and special districts in San Luis Obispo County, non-profit and conservation organizations, and the neighboring counties.

OSG3: Prevent Urban Sprawl.

a. Prevent urban sprawl by maintaining a well-defined boundary between urban/village boundaries and surrounding rural areas.

b. Maintain permanent separations between communities in order to retain the rural character of the county.

c. Protect rural and open space lands from inappropriate conversion to suburban and urban uses by establishing criteria to determine if a proposed conversion should be approved.

OSG4: Encourage Public Education and Participation.

a. Encourage ongoing public education programs by such organizations as the County Parks and Recreation Commission, the County Department of Agriculture, U.C. Cooperative Extension, the Resource Conservation Districts, and conservation organizations, to provide information about open space resources in San Luis Obispo County and help the public to better understand the importance of conserving and protecting those resources.

b. **Encourage public participation through the public hearing process in the on-going development of plans, policies, and ordinances affecting open space lands through such organizations as the county Parks and Recreation Commission, the Agricultural Liaison Board, conservation organizations, and community advisory groups.**

OPEN SPACE POLICIES (OSP)

The above open space goals are implemented by the following policies and implementation measures. These policies are intended to be consistent with adopted policies, standards and ordinances of the Local Coastal Plan (LCP) and are in addition to all applicable LCP policies, standards and ordinances.

Just as the open space resources can be found on lands that are in various designations shown on the maps in the plan, the policies and implementation measures to address those resources also overlap in their application; they are not distinct from one another. For example, lands designated as Recreation Areas and Multi-Use Public Lands can contain sensitive and scenic resources. Likewise, protecting sensitive and scenic resources can also help protect the rural character of the county. Therefore, **the open space policies and implementation measures should be considered and applied as an integrated set of recommendations to achieve the county's open space goals.** The recommended **implementation measures** are the county's **action plan for implementation of the Open Space Element**, as required by State planning law.

OSP 1: Public Education.

a. **Support and participate in on-going educational programs aimed at informing the general public about open space resources.**

b. **Reactivate the county Conservation Advisory Committee to work with its counterpart, the Agricultural Liaison Advisory Board, to increase public awareness of issues affecting open space resources, the relationship between open space and agricultural issues, and to provide a wider range of advice to the Board of Supervisors.**

Discussion: There should be a commitment to on-going public education about the importance and role of open space resources in the county if the goals and policies in this element are to be effectively accomplished. There are a variety of public and private organizations that participate in education programs focused on open space resource protection and conservation, including but not limited to the County Parks and Recreation Commission, Department of Agriculture, Resource Conservation Districts, numerous

conservation organizations, and others. The county should actively participate in such programs.

One way for the county to be more active in this realm would be to reactivate the county Conservation Advisory Committee. Active in the1970's and early 80's but inactive since that time, the advisory committee would offer a forum for discussion of issues related to open space resources and conservation comparable to the role played by the Agricultural Liaison Advisory Board for agricultural issues. Having two such advisory committees that can maintain an ongoing dialogue on issues affecting both agriculture and open space can lead to more educated and informed persons providing advice to the Board of Supervisors and the general public about the implementation of this element and the future development of policies.

Implementation:

1. The county Parks and Recreation Commission, in coordination and cooperation with the Department of Agriculture, the Resource Conservation Districts, and conservation organizations should actively participate in public education about the importance of the open space resources in the county.

   Timeframe: Ongoing.

2. The Board of Supervisors should reactivate and provide direction for the County Conservation Advisory Committee.

   Timeframe: Six months from plan adoption.

General Policies

The following general open space policies (OSP) apply to many or all of the open space resources discussed in this chapter. Implementation measures for these general policies can be found following OSP 6.

OSP 2: Public and Private Development.

a. The open space policies and implementation measures in this element shall apply equally to public and private use and development on non-agricultural lands.

Discussion: The purpose of this policy is to recognize that the open space policies and implementation measures apply equally to public as well as private projects. When public

agencies propose projects, the agencies are in a position of setting a positive example for the rest of the community. Since the following policies and implementation measures are part of the county general plan, the plans and programs of county agencies, school districts and other special districts shall be consistent with them.

Implementation/Timeframe: See general implementation measures following OSP 6.

OSP3: Conservation and Protection by Private Landowners.

a. **Encourage private land owners to protect and maintain open space resources on their properties.**

b. **Educate private landowners about the importance of protecting and maintaining environmentally sensitive resources and productive ecosystems.**

Discussion: The purpose of this policy is to encourage private landowners to protect and maintain open space resources. Protection and management of open space is especially important since much of the county's open space resources are located on private property.

Implementation/Timeframe: See general implementation measures following OSP 6.

OSP4: Future Open Space Protection.

a. **Continue to identify and protect open space resources.**

b. **Incorporate up-to-date scientific information and techniques into programs to identify, protect, and manage open space resources.**

Discussion: The purpose of this policy is to continue efforts to protect open space resources after such resources are mapped. In order for open space protection efforts to be successful, they need to be based on accurate, scientific information. As such new information becomes available, the maps, policies and implementation measures in this element should be revised as appropriate.

Implementation/Timeframe: See general implementation measures following OSP 6.

OSP5: Acquisition of Open Space.

a. **Encourage and support efforts by state and federal agencies, cities, special districts, and non-profit and conservation organizations to protect lands containing open space resources.**

b. **For properties acquired by the county through tax default that contain open space resources, the county should either:**

   1. **Retain ownership;**

   2. **Protect the open space resource through easements or other mechanisms and then offer for sale to a surrounding property owner or other interested party; or**

   3. **Consider the trade of such properties if the trade can better protect open space resources elsewhere or can move potential development from rural to urban or suburban areas.**

   The decision should be based on a site-specific analysis and identification of critical open space resources on the property.

c. **Based on the county's Parks Master Plan, consider acquiring lands from willing sellers, either in fee title or easements, in order to establish or expand recreation areas or to protect previously identified open space resources. If the land involves active agricultural production, the county should consider keeping the land in an agricultural use if such use is compatible with the purpose for which the land was acquired.**

d. **The county should establish a habitat banking program through which environmental mitigation fees can be used to purchase open space for the protection of sensitive habitat.**

e. **Coordinate efforts to acquire open space lands with other public agencies and conservation organizations.**

Discussion: There are several purposes for this policy. First, non-profit and other conservation organizations are important participants in the efforts to protect lands containing critical open space resources. Such organizations include the Land Conservancy of San Luis Obispo County, The Nature Conservancy, the American Farmland Trust, and the Coastal Conservancy. These organizations can provide assistance to land owners interested in protecting ecological, aesthetic and agricultural values on their land. They may offer a wide variety of services, including technical assistance to property owners and government agencies in establishing conservation easements, transfer of development credits, estate donation and other conservation programs, as well as provide public awareness of open space issues.

A second purpose of this policy is to encourage the county to continue to use tax default acquisitions because they can be an excellent way to protect open space resources at little cost to the county. In areas with important open space resources, the county should retain properties acquired by tax default so that the properties can be assembled into open space preserves. The properties can then be managed by the county, or possibly traded to other agencies or conservation organizations for long-term protection of the resources. In addition, it may be possible to add these properties to existing ecosystem preserves in order to enhance those important open space resources.

The third component of this policy recognizes that county acquisition of open space resources from willing sellers is one of the key ways to protect such resources, even though it can be costly and public funds are usually limited. Such acquisitions can be by fee title to the land, or the purchase of easements that protect the resource while the fee title to the property remains in private ownership. Refer to the General Implementation Measures that follow OSP6 for a list of the variety of ways to fund acquisition of open space. Other innovative funding methods should also be explored.

The fourth component of this policy deals with "habitat banking." This involves the purchase by the county or other agency of large, regionally significant areas of habitat or ecosystems, such as Major Ecosystems (see page 3-48) or Natural Area Preserves (see page 3-56). Larger areas of habitat have a greater chance of maintaining productive ecosystems and species diversity and hence the survival of plants and animals. The funding for this type of program is obtained from mitigation fees paid by developers to mitigate the effects of individual development projects on smaller, isolated and unconnected pieces of habitat. By preserving the larger areas, habitat banking affords a way for development projects to proceed while contributing to preservation of areas that have the best chance of supporting productive ecosystems in the long term.

A habitat enhancement program is very similar to habitat banking, but involves the restoration or enhancement of large, regionally significant areas of habitat or ecosystems as a way to mitigate the effects of development on smaller, isolated area of habitat within individual projects. This program can involve either varying mitigation fees, or requiring developers to be directly responsible for performing enhancement or restoration activities.

Finally, this policy recognizes that close coordination is necessary among federal, state and local agencies and private conservation organizations in their efforts to protect open space resources. This coordination is important because the decisions of other agencies can affect adjacent privately-owned lands and development of privately-owned lands can adversely affect public agency management strategies. By closely coordinating and sharing information with public agencies and conservation organizations, duplication can be avoided and efforts to preserve open space can be balanced with the interests of private property owners. Cooperative agreements between the county and conservation

organizations should be explored in order to use both public and private funding for acquisitions and to allow open space acquired by the county to be managed by either the county or conservation organizations.

Implementation/Timeframe: See general implementation measures following OSP 6.

OSP6: Management of Public Open Space Lands.

a. **Manage public open space lands so as to protect and, where necessary, restore the open space resources. Encourage such management strategies on private lands.**

b. **Coordinate efforts to manage open space lands with other public agencies and conservation organizations.**

c. **Utilize best management practices. Where the lands involve agriculture, consider agriculture or grazing as a natural resource management tool.**

d. **The county should carefully evaluate, in conjunction with state and federal agencies and local organizations, whether and under what circumstances bio-solids are appropriate for disposal on open space lands.**

Discussion: There are multiple purposes for this policy. The first is to recognize the importance of ongoing management of publicly-owned open space lands. Simply preserving open space resources and leaving them alone does not ensure their continued protection. Often, maintenance or restoration, such as removal of exotic species or erosion control, is needed in order to maintain healthy, productive ecosystems and environmentally sensitive resources. Such activities should be provided for on any open space lands that are in public ownership.

Like the discussion of OSP 5 above, a second component of this policy is to recognize that close coordination is necessary between the many types of agencies and organizations that may become involved in the acquisition and maintenance of publicly-owned open space lands. Cooperative agreements and creative, innovative funding methods should be fully explored to implement this policy.

The third component of this policy is to recognize that publicly-owned grazing lands are an important resource, but that grazing or other agricultural uses should be managed to avoid potential damage to sensitive resources such as plant and animal habitat. The county should incorporate best management practices into leases it enters into for long-term operation of open space lands.

The fourth component of this policy relates to the potential land disposal of bio-solids on lands designated open space, similar to the corresponding policy for agricultural lands (AGP 13b). Possible land disposal of bio-solids needs careful consideration on all types of lands, not just agricultural lands.

Implementation/Timeline: See the following general implementation measures.

For OSP 6d, the following implementation should apply:

> The Board of Supervisors should ask the Environmental Health Department and the County Parks Department, with public participation and input, to develop recommendations as to whether and under what circumstances bio-solids can be used on open space lands. A temporary moratorium should be considered on land disposal of bio-solids until the Board of Supervisors considers adoption of a permanent policy or ordinance.
>
> **Timeline:** 12 months from plan adoption.

General Implementation Measures

The following general implementation measures support the above open space policies, OSP 2 through OSP 6. These measures may also be useful in carrying out many of the open space policies discussed later in this chapter. To find implementation measures for a particular type of open space resource and its applicable policies, refer to the appropriate section in this chapter.

1. Establish priorities, criteria and a rating system for acquisition of significant open space resources from willing sellers so that public preservation efforts can be most effective.

   Discussion: Before embarking on an acquisition program, the county should identify the most significant open space resources and establish criteria and a rating system to determine which particular sites have the highest priority for acquisition at a particular time. Setting up such criteria is essential to assuring that public funds are used to acquire the most important open space resources at the appropriate time in the most cost-effective manner. It should also be recognized that the loss of public tax revenues may be the trade-off for preservation of open space lands, such as is the case with implementation of the Williamson Act.

   Implementation: The Departments of Planning and Building and General Services, in consultation with environmental and agricultural organizations, should conduct detailed studies and establish a rating system for purchase of significant open space resources from willing sellers.

Timeframe: 24 months from plan adoption.

2. The following acquisition strategies can be carried out by conservation organizations or by the county, and should in all cases be accomplished between willing buyers and sellers. In those instances where the county is an active participant in any of these strategies, the focus should be on purchase of easements and development rights, rather than the outright purchase of open space lands. Public purchase is the most problematic due to limited public funds. Therefore, private ownership or ownership by non-profit entities should be considered preferable.

   a. **Transfer of Development Credits (TDC).** TDC programs are discussed in detail in AGP 15 in chapter 2. Use of the county's voluntary TDC program should be implemented for the protection of open space resources in the same manner as for agricultural resources.

      Implementation:

      1. Ongoing through the voluntary action of land owners.

      2. Prepare proposed amendments to the LCP that would add the voluntary TDC program as an available land use tool in the coastal zone.

      Timeframe: 18 months from plan adoption.

   b. **Tax Default Acquisition and Sale of Excess and Tax Delinquent Properties.** In addition to retaining properties with open space resources, consider placing all revenue from the sale of excess and tax delinquent properties that are without open space resources into a special park and open space purchase and improvement fund. Also consider offering such properties particularly to adjoining property owners for sale, lease or management of the resource.

      Implementation: The Department of Planning and Building should work with the Assessor, Tax Collector, and the Department of General Services to develop a program for consideration by the Board of Supervisors.

      Timeframe: 24 months from plan adoption.

   c. **Land Exchange.** Exchange publicly-owned land that is not needed for open space protection or other public uses for privately-owned land with open space resources.

Implementation: The Department of General Services should prepare an inventory of county-owned lands and develop criteria for land exchanges for approval by the Board of Supervisors.

Timeframe: 24 months from plan adoption.

d. **Donations and Gifts.** Actively seek contributions of land, development rights, easements, and money from individuals and corporations, both for preservation of open space and recreation land in general and for acquisition of specific properties. In order to make this strategy effective, the San Luis Obispo Parks, Open Space and Trails Foundation (known as SLO POST) was created in 1991 to provide special assistance to landowners and to receive gifts. The county should also seek individual donations of labor and materials to maintain, restore or enhance open space lands. Landowners should be encouraged to evaluate possible tax advantages resulting from gifts and donations of land, development rights and conservation easements.

Implementation: San Luis Obispo Parks, Open Space and Trails Foundation (SLO POST) should continue to work with willing landowners interested in making donations and gifts towards open space and recreational resources.

Timeframe: Ongoing.

e. **Grants.** Actively seek all available grants and aid programs from state and federal agencies and private foundations to fund acquisition and maintenance of open space lands.

Implementation: The Department of General Services should work with public and private agencies to identify possible grants.

Timeframe: Ongoing.

f. **Special Districts.** Consider establishing a Regional Parks and Open Space District, county service areas (CSA's) or Mello-Roos community facilities districts (CFD's) where appropriate to finance acquisition and maintenance of open space. These special districts provide mechanisms for the public to finance protection of open space resources. Within CFD's, special taxes may be levied and bonds issued to finance acquisition and maintenance of open space upon approval by a two-thirds vote of the electorate within the district.

Implementation: The Department of General Services should prepare an analysis of alternatives for consideration by the Board of Supervisors.

Timeframe: 24 months from plan adoption.

g. **Lease-Purchasing and Certificates of Participation.** Consider using these additional methods to finance purchase of open space lands. Lease-purchasing is similar to a loan, whereby the county or other public agency leases a property for a certain period of time. At the end of that period, the agency has made principal and interest payments sufficient so that it ends up owning the property. Certificates of Participation (COP's) are often used together with lease-purchasing. They are similar to bonds issued to investors, who receive payments from the public agency's annual lease payments. Certificates of Participation are not subject to statutory limitations on long-term debt and may issued without voter approval.

Implementation: The Departments of General Services and Planning and Building should prepare proposals for consideration by the Board of Supervisors.

Timeframe: 24 months from plan adoption.

h. **User Fees and Concessions.** Consider using revenues from user fees and concession sales in developed county park facilities to finance acquisition and maintenance of open space.

Implementation: The Department of General Services should prepare a feasibility analysis and recommendations for consideration by the Board of Supervisors.

Timeframe: 24 months from plan adoption.

i. **Public/Private Joint Venture, Corporate and/or Non-Profit Sponsors.** Consider forming partnerships with the private sector in order to generate income or services for open space preservation. For example, private companies or non-profit organizations may donate labor to construct recreational facilities or provide maintenance or restoration activities. Companies may also become sponsors for construction and operation of recreational facilities. In return, the companies benefit from advertising and increased public exposure. These strategies work best in intensively used open space areas.

Implementation: The Department of General Services should develop a program for consideration by the Board of Supervisors.

Timeframe: 24 months from plan adoption.

j. **Taxes.** To fund open space preservation, consider using revenues from taxes. Ensure there is a clearly stated connection between the proposed taxes and those parties or persons who will benefit from the taxes.

Implementation: There are a variety of taxes that could be considered as funding sources for the preservation of open space resources. These include but are not limited to the transient occupancy tax (hotel or motel bed tax), a local sales tax option, or a real estate transfer tax to be charged when real estate changes ownership. The County Administrative Office, Tax Collector and Assessor should develop proposals for consideration by the Board of Supervisors.

Timeframe: 24 months from plan adoption.

k. **Habitat Banking.** Habitat banking and habitat enhancement programs should be established for the protection of large, regionally significant areas of habitat or ecosystems.

Implementation: Establish a habitat banking program, funded by environmental mitigation fees, for the purchase of land, development rights, or conservation easements to preserve important habitat areas.

Timeframe: 24 months from plan adoption.

3. The Department of Planning and Building and the County Parks and Recreation Commission should review and comment on new plans and policies such as those involving acquisitions and disposal of land proposed by federal, state and local agencies and private conservation organizations. Refer major or controversial proposals to the Board of Supervisors.

Implementation: The Departments of Planning and Building and the County Parks and Recreation Commission should review, comment on and/or refer relevant plans.

Timeframe: Ongoing.

4. On county maintained land, consider grazing and other agricultural uses as part of an overall best management strategy, but manage those uses so they will not degrade environmentally sensitive resources.

Discussion: The Department of General Services, in consultation with the County Agricultural Commissioner and designated representatives from U.C. Cooperative Extension, Cattlemens Association, Grazing Advisory Board, environmental and conservation organizations, and representatives from Native American groups should

prepare site specific management strategies for review and approval by the Board of Supervisors. The management strategies should be used in new or renewed leases and should include establishment of appropriate market-based lease rates.

Timeframe: Complete the site specific review within 36 months of plan adoption and implement in subsequent new or renewed leases..

5. Encourage the federal government to lease public lands for grazing where it can be supported without degrading environmentally sensitive resources.

Timeframe: Ongoing.

Policies regarding the protection of open space lands.

OSP7: Consolidation of Public and Private Lands.

a. Encourage consolidation of publicly and privately owned lands into larger, more viable units in order to reduce "checkerboard" ownership, establish or expand recreation areas, protect other open space resources, facilitate better land management, or reduce trespass problems.

b. Encourage the sale or trade of isolated publicly owned parcels that are contiguous to privately owned lands if the sale or trade leads to better protection of open space resources. Use voluntary merger or lot line adjustment processes so there is no increase in the number of privately owned parcels. Land that is transferred or sold should receive a land use designation that is compatible with surrounding uses, such as Agricultural or Large Lot Rural.

c. Do not remove land from the public domain without careful study to determine its value to any government agency or the general public. Retain land in public ownership that has potential for recreation, wildlife habitat and management, conservation of ecosystems, water conservation, scenic, historic, or other important open space purposes. Support retention of BLM land in public ownership where it adjoins the National Forest, unless subject to OSP 6 above.

Discussion: The purpose of this policy is to support the protection and enhancement of publicly-owned recreational and other open space resources, while at the same time recognize the needs of adjacent private landowners, farmers and ranchers. One way to accomplish this is through land exchanges with private landowners. Adding to existing

publicly-owned lands can enhance opportunities for recreation and protect environmentally sensitive and other open space resources.

Lands under public ownership should also be designated to reflect the land's open space value. For example, the LUE currently includes most BLM land in the Rural Lands category, but the Open Space category would better reflect the true open space value of the land. When publicly-owned land is transferred to private ownership--mainly for the purpose of consolidating respective land holdings--the land should be designated either Agriculture or Large-Lot Rural (Rural Lands in the LUE) in order to maintain large parcel sizes on those generally rugged and remote lands.

Implementation:

1. Work with local, state and federal agencies and conservation organizations to identify lands that are suitable for disposal and exchange. An inventory of these lands should be prepared for review by the Board of Supervisors to determine the appropriate course of action.

   Timeframe: 24 months from plan adoption.

2. Prepare proposed amendments to the purpose and character statements for the Open Space land use category in Framework for Planning of the LUE to include all rural lands designated Multi-Use Public Lands in this plan that are not used or planned for active recreation or other intensive public uses.

   Timeframe: 24 months from plan adoption.

3. Prepare proposed amendments to the LUE to change the land use category of BLM land from Rural Lands to Open Space where the properties are expected to stay in long-term public ownership based on the inventory of BLM properties described in AGP 19.

   Timeframe: 24 months from plan adoption.

4. Prepare proposed amendments to the LUE to change the land use category to Open Space where major land holdings are owned by conservation organizations for the purpose of protecting open space resources.

   Timeframe: 24 months from plan adoption.

OSP8: Land Conservation Contracts.

a. **Consider the use of open space contracts under terms of the county's Rules of Procedure to Implement the California Land Conservation Act of 1965 (the Williamson Act) to protect rural properties that contain identified recreational and open space resources.**

Discussion: While the county has an extensive and very active agricultural preserve program, property owners have not applied for Williamson Act contracts for open space lands for the purpose of protecting recreational or open space resources. Contracts may cover lands devoted to open space uses such as a scenic highway corridor, a wildlife habitat area, a saltpond, a managed wetland area, or a submerged area. Contracts may also cover recreational uses such as walking, hiking, picnicking, camping, swimming, boating, fishing, hunting, or other outdoor activities for which facilities may be provided for public participation. If Williamson Act contracts are to be used for protection of open space resources, care should be taken to make sure that these types of contracts will not undermine the effectiveness or credibility of the local implementation of the Act. Further details about these types of open space preserves are described in the county Rules of Procedure as adopted by the Board of Supervisors.

Implementation:

1. Propose amendments to the County's Rules of Procedures that clearly define the criteria to be used in evaluating the proposed use of Williamson Act contracts to protect and conserve open space resources. Those criteria should ensure that open space contracts will not have a negative impact on adjacent agricultural uses, or on the existing countywide agricultural preserve program.

   Timeframe: 18 months from plan adoption.

2. Provide public information bulletins regarding the benefits of entering into open space contracts for the long term protection of recreation and open space resources.

   Timeframe: Ongoing.

3. As incentives to property owners to enter into contracts:

   a. implement a fee schedule, similar to that used for contracts for agricultural lands, for reviewing applications requesting an agricultural preserve for the protection of recreational or open space resources; and

Timeframe: At the next annual review of the countywide fee schedule following adoption of this plan.

b. provide timely processing of land use permit applications for development associated with recreational facilities on lands subject to a Williamson Act contract.

Timeframe: On-going.

OSP9: Transfer of Development Credits (TDC).

a. **Continue to utilize the voluntary TDC program adopted by the Board of Supervisors to help protect open space resources by guiding development to more suitable areas.**

Discussion and Implementation: See the discussion of the program that is included with AGP 15 in chapter 2, and general implementation measure #2a in this chapter.

OSP10: Land Divisions and Development

a. **Encourage the use of cluster land divisions and cluster development that will locate residential clusters on the least environmentally sensitive portions of properties.**

b. **Where a land owner proposes a conventional land division, the proposed parcels shall maintain or enhance the long-term protection of open space resources.**

c. **The size and location of open space areas should be chosen so as to maximize protection of the open space resources. Where possible, locate open space contiguous with existing areas of natural open space.**

d. **Where called for by the environmental document as an environmental mitigation, require on-going management of open space parcels for the purpose of sustaining the open space resources.**

Discussion: The first component of this policy is to encourage development that is sensitive to the environment. This is done by clustering homesites and other development in suitable areas that are located away from sensitive open space resources, instead of scattering them over the landscape. Clustering can minimize disturbance of terrain, reduce the extent and number of access roads, and decrease costs of development. Clustering can

also allow residents to share the enjoyment of scenic and recreational amenities in a common open space area.

The use of cluster development and cluster land divisions should be encouraged in order to carry out the following objectives (not in any priority order):

* Protect sensitive resource areas, including ground water recharge areas, and other significant open space features by locating development on the least environmentally or visually sensitive portions of properties.

* Locate development on the portions of a site that are most suitable for development.

* Provide open space buffers to protect land uses on adjacent properties.

One way to encourage the use of cluster development and cluster land divisions is to provide an additional incentive through an increase in the number of parcels over what is currently provided by the LUO and CZLUO (being allowed to compute allowed density based on gross rather than net acreage). Instead, the parcel increase should be comparable to the maximum 25 percent increase for minor agricultural cluster divisions (see AGP23). Applicants should also be advised of the lower costs of development using the cluster approach (fewer roads, shorter utility system extensions, less site preparation costs, more compact building areas, etc).

There will be circumstances where a land owner proposes a conventional division of land and does not wish to accomplish any increase in the number of parcels, or the owner feels the conventional design best meets the goals for the property. In those instances, the environmental review of the proposed land division should carefully consider whether the resulting parcels will provide the maximum amount of long-term protection for the identified open space resources. This should include consideration of designated building envelopes, possible limitation on the number of residences that can be established on the proposed parcels, and locating the open space contiguous to existing areas of natural open space. Conservation easements should also be considered, along with provisions for ongoing management of the open space parcels so that the open space resources will be sustained for the long term.

For larger properties, the county should make better use of the provisions of the Williamson Act that allow the use of agricultural preserve contracts for the protection of open space and recreational resources, as discussed in OSP 8. Amendments should be considered that would make the use of such contracts a more attractive incentive for the protection of open space resources.

Implementation: The Department of Planning and Building should draft proposed amendments to the LUO, CZLUO, Title 21, and the Williamson Act Rules of Procedure to carry out this policy as described above, and consistent with OSP 8.

Timeframe: 18 months from plan adoption.

OSP 11: Conversion of Rural Areas to Urban Lands.

a. **Discourage the conversion of rural areas of the county to Urban Lands as designated in this plan through the following actions:**

1. **Do not expand existing urban or village areas (the Urban Lands designation in this element) until such areas are largely built-out, or additional land is needed to accommodate necessary uses or services that cannot otherwise be accommodated within the existing urban or village area.**

2. **Expand urban or village areas only where contiguous to an existing urban/village reserve line as shown in Figure 3-6, unless an entirely new urban or village areas is needed in order to direct growth and protect the surrounding rural lands and the rural character of the area.**

3. **Urban development shall be annexed to an incorporated city or an existing community services district/county service area. Such annexation shall occur only where cluster development from rural property is to be located adjacent to the urban area or where and when higher density development is to occur and where consistent with resource and service capabilities and orderly extension of urban services.**

4. **Conversions shall not adversely affect existing or potential agricultural production of surrounding lands designated Agriculture or existing agricultural production on other lands. The effect on groundwater resources shall be considered (see AGP 25).**

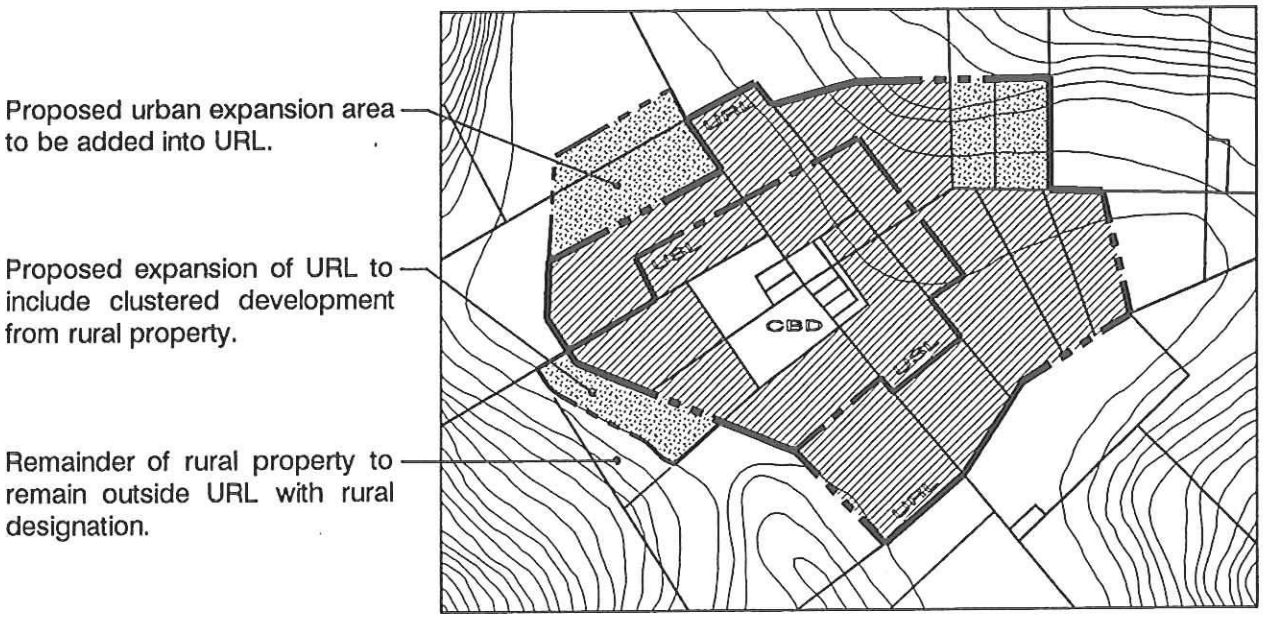
5. **Within urban and village reserve lines, maintain large parcels, preferably at least 10 acres in size, until such time as full urban services can be provided.**

b. **Land that is presently designated Agriculture must meet the criteria established by AGP 24 before conversion to Urban Lands in this element.**

Discussion: The purpose of this policy is to provide for appropriate and orderly expansion and development of urban and village areas. This policy allows maximum flexibility and options in planning for future urban land uses, circulation and extension of services and utilities. The policy also supports the policies in Framework for Planning of the LUE regarding orderly expansion of urban and village areas, and as shown in Figure 3-6.

After existing urban and village areas are largely built-out, urban expansion may occur. Urban expansion should be directed to areas that are: (1) outside of and adjacent to existing urban and village areas; (2) needed for orderly community growth; (3) not constrained by important open space resources; (4) not important for agricultural purposes; and (5) not needed for retention in low density rural uses. In those areas, sufficient resources (i.e., water supply, sewage treatment capacity, etc.) must be available or be provided prior to urban expansion.

Figure 3-6



In order to provide urban services efficiently, the land needs to be annexed to a city, community services district, or a county service area. Directing urban expansion in that manner will promote development of compact communities and help avoid urban sprawl. Once an area is included within an urban or village reserve line, parcel sizes should remain large where possible until the ultimate intensity of development can be achieved. By doing so, a range of options will be available for development and it will be more likely that full urban development will occur when and where it is most appropriate. This process will also help avoid urban sprawl.

This policy also allows for creation of new urban or village areas. Development of new towns in appropriate areas could reduce urban sprawl and protect agricultural and environmentally sensitive resources - key goals of this plan.

Implementation:

1. Prepare proposed amendments to the Framework for Planning of the LUE to reference this policy in the guidelines for evaluating proposed general plan amendments.

   Timeframe: 18 months from plan adoption.

2. Consider further amendments to general plan policies which clarify the criteria for converting rural lands to urban and village land uses and the creation of new towns where applicable.

   Timeframe: 24 months from plan adoption.

OSP12: Conversion of Lands to Small-Lot Rural (Residential Rural and Residential Suburban in LUE).

a. In order to maintain a well-defined urban boundary, avoid the creation of new Small-Lot Rural designations (Residential Rural/Suburban LUE land use categories) in rural areas.

b. Land adjacent to an urban or village reserve line may be converted to Small-Lot Rural only if all the following criteria are met:

1. The County Agricultural Commissioner, or a special panel appointed for this purpose, determines that the land is not capable of production agriculture; and

2. **Future development can reasonably be expected to occur without adverse impacts to any on-site open space resources; and**

3. **The land consists of separately-owned parcels that are less than 20 acres.**

c. **Land <u>not adjacent</u> to an urban or village reserve line may be converted to Small-Lot Rural only if all the following criteria are met in addition to the criteria of section b. above:**

1. **The County Agricultural Commissioner, or a special panel appointed for this purpose, determines that the conversion will not adversely affect existing or potential agriculture on surrounding lands designated Agriculture or existing agricultural production on other lands. Consistent with AGP 24, the effect on groundwater resources will also be considered.**

2. **Resources that support the proposed type and density of development shall be available or shall be provided as a condition of development.**

3. **Either: (a) a planning area standard shall be established with the requested general plan amendment to require a minimum parcel size or equivalent density of 10-20 acres, or (b) the land is a designated receiving area as part of a TDC program.**

d. **Land that is designated Agriculture must meet the criteria established by AGP 24.**

e. **Where the land is contiguous to an urban or village reserve line, consider a designation of Urban Lands if the criteria of OSP11 are met.**

Discussion: The purpose of this policy is to discourage urban sprawl by preventing "leapfrog" development and by maintaining a clear distinction between urban/village and rural areas. In rural areas, parcels should be at least 10 to 20 acres in size (except in cluster subdivisions where the overall density would be equivalent but the lot sizes may be smaller than 10 to 20 acres). Accordingly, this policy limits the establishment of new Small-Lot Rural designations (and Residential Rural/Suburban designations in the LUE) outside of urban and village reserve lines, unless the specified criteria for conversion can be met. This policy will also provide flexibility and options in planning for future orderly growth within urban areas.

Implementation:

1. Prepare proposed amendments to Framework for Planning of the LUE by referencing the land conversion criteria in this policy in the LUE guidelines for general plan amendments.

   Timeframe: 24 months from plan adoption.

2. Prepare proposed amendments to Framework for Planning of the LUE revising the purpose and character statements for the Residential Suburban and Residential Rural land use categories to limit the establishment of those categories in rural areas unless they meet the criteria stated in this policy.

   Timeframe: 24 months from plan adoption.

3. Prepare proposed amendments to the purpose and character statement for the Rural Lands land use category in Framework for Planning of the LUE to state that the Rural Lands category is also applied near urban and village areas in order to maintain a clear distinction between urban/village and rural areas and to provide maximum flexibility and options in planning for future orderly growth in urban areas.

   Timeframe: 24 months from plan adoption.

4. Prepare proposed amendments to the LUE by changing the land use category of lands designated in this plan as Large-Lot Rural to Rural Lands or other appropriate, corresponding LUE land use category shown in Figure 1-3.

   Timeframe: 24 months from plan adoption.

5. Prepare proposed amendments to the LUE by changing the land use category of lands designated in this plan as Small-Lot Rural to Residential Rural in the LUE, except for lands in the Residential Suburban land use category. Where a Residential Rural category is established, amend the applicable LUE area plan to establish a minimum parcel size of at least 10 to 20 acres.

   Timeframe: 24 months from plan adoption.

Protection of natural and scenic resources.

Many of the sensitive and scenic areas identified in this plan are already identified in the LUE by existing Sensitive Resource Area (SRA) combining designations. In those areas, standards in the

LUE and LUO protect sensitive resources and mitigate the effects of development. However, there are also other important sensitive and scenic areas and features that are currently not designated in the LUE, such as major ecosystems, key wildlife corridors, sensitive natural communities identified by the California Department of Fish and Game, important habitat such as oak woodlands identified by the California Department of Forestry, or county Natural Area Preserves. The following portion of this chapter describes the many natural, sensitive and scenic resources that occur on open space lands throughout the county, followed by policies aimed at protecting these important resources.

As noted in the introduction to this portion of this chapter, many important open space resources may be located on lands designated as Agriculture by this plan. In those instances, protection of the resources are addressed in the Agriculture Element policies AGP 25 through AGP 34.

Ecosystems

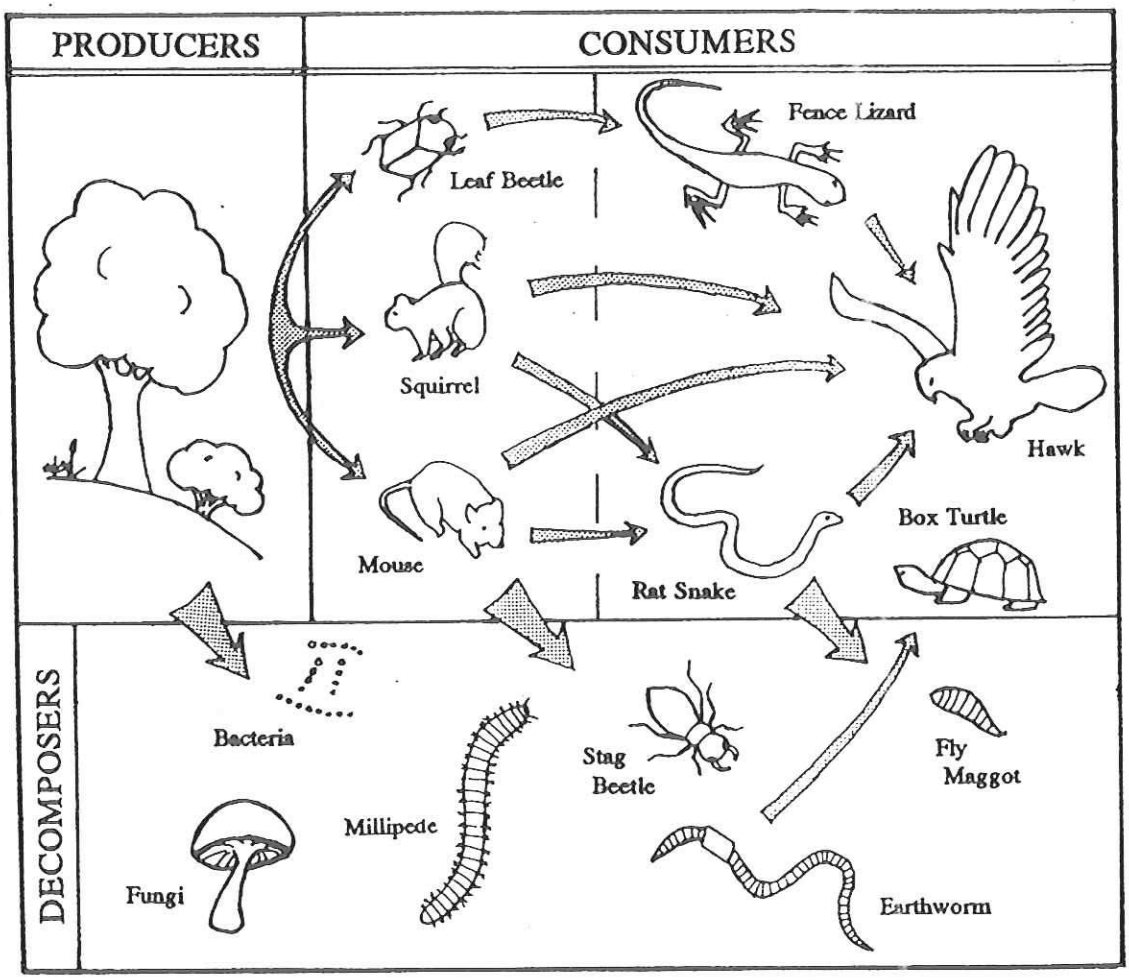
Ecosystems hold the key for preserving vegetation and wildlife. In fact, we cannot truly protect endangered species unless we preserve the ecosystem that they depend on and interact with. Accordingly, the wisest and most efficient strategy for preserving rare or endangered species - and in the long run the least costly - is to prevent them from becoming rare and endangered in the first place.

An ecosystem can be defined as all the components of a biological community and the physical environment, and the interactions among and between them. Ecosystems are more than just the sum of their various components, involving a complex system of linkages between plants, animals, their environment, and humans.

The key to protecting biological resources and sustaining the great variety of lifeforms on earth is to protect and sustain healthy, functioning ecosystems and the biological diversity within them. "Biodiversity" refers to all living organisms and the ecological setting on which they depend for life; the natural variety, abundance and variability of different plant and animal species. One of the generally accepted key principles of ecology is that biological diversity leads to stability of an ecosystem.

The connectivity between species in a natural community is demonstrated when one looks at the food web, as shown in Figure 3-7. If one of the key links in the system is broken - a certain keystone species is lost, for example, - the functioning of the entire ecosystem upon which many plants and animals depend can be weakened and the natural communities lost. Extinction of a key plant or animal - predator or prey - can be the beginning of the end for an ecosystem. The key to avoiding this is to maintain the complex system of linkages in the ecosystem wherever

Figure 3-7



The connectivity between members of the ecosystem can be seen in the food web.

Source: **Peck, Sheila, Landscape Conservation Planning: Preserving Ecosystems in Open Space Networks; Integrated Hardwood Range Management Program, U.C. Cooperative Extension, 1993.**

possible. This can be done by maintaining large, unfragmented areas of natural habitat and by maintaining physical connections between those areas to enable wildlife migration - preserving biological diversity.

This Agriculture and Open Space Element is an important step towards conservation planning in San Luis Obispo County. If planning programs can be more effective on an ecosystem basis, the programs will be more effective at protecting those species already listed as rare and endangered. More effective programs could also reduce the number of new species added to the rare and endangered lists.

According to Sheila Peck, author of **"Landscape Conservation Planning: Preserving Ecosystems in Open Space Networks,"** most regional planning efforts fail to include a comprehensive landscape conservation plan. Such a plan should have as a primary goal the preservation of original local species in perpetuity, as well as protect essential ecological processes such as hydrological patterns, nutrient cycles and food webs. It is essential that the landscape conservation plan be based on the cooperative efforts of planners, policymakers, researchers, and private citizens.

It is often argued that there is not the technical information on which to base broad conservation plans. However, it is important to keep in mind that there may never be all the information needed. Waiting until all the information is available will mean no action, possibly resulting in the loss of many species and options. Also, it is less costly in both economic and ecological terms to conserve a healthy ecosystem than to recreate natural resources that have been lost. Therefore, efforts towards conservation planning should move forward, with each plan considered an experiment to be monitored and evaluated for appropriate changes as more data become available over time.

The most effective strategy would be to sustain entire natural ecosystems. This approach is complicated by the fact that ecosystems often span many types of land uses and ownership patterns, and do not respect political boundaries. They often cross the jurisdictions of cities, counties, government lands, and states. By waiting until species are endangered before taking steps to protect them, the task becomes difficult, costly and usually controversial. The focus should shift from trying to protect individual species once they become endangered (although that is still important) to protecting entire ecosystems before that happens. Since ecosystems exist on such a large scale, their protection must involve new and innovative measures that go beyond traditional land use regulations.

A network of Major Ecosystems should be established in areas that have minimal disturbance and high biological diversity, with the minimum size and the boundaries of the system based on accepted principles of ecology and wildlife management. Land swaps should also be encouraged as a means to building larger contiguous blocks of habitat for inclusion in the design of the Major Ecosystem. The core of the Major Ecosystems network should be existing public lands, such as

those controlled by the Bureau of Land Management and the U.S. Forest Service. County Natural Area Preserves (see the discussion later in this section) also have excellent potential to serve as the cores of Major Ecosystems. Major Ecosystems could also eventually be considered as environmental mitigation receiver sites to offset the impacts of development allowed elsewhere in the county where it may not be feasible to accomplish mitigation on site.

In order to be as viable as possible, Major Ecosystems should be comprised of large, contiguous areas rather than several smaller, isolated, fragmented islands of habitat. The ecosystem must be large enough to allow for the migration of wildlife and to sustain the diversity of wildlife populations. There should be large open space areas that can be connected by landscape corridors to enable species and ecological processes to move from one area to another. The objective of the spatial design of the Major Ecosystem should be to create a system that will maximize the identified ecological values and minimize the negative impacts to and from surrounding lands.

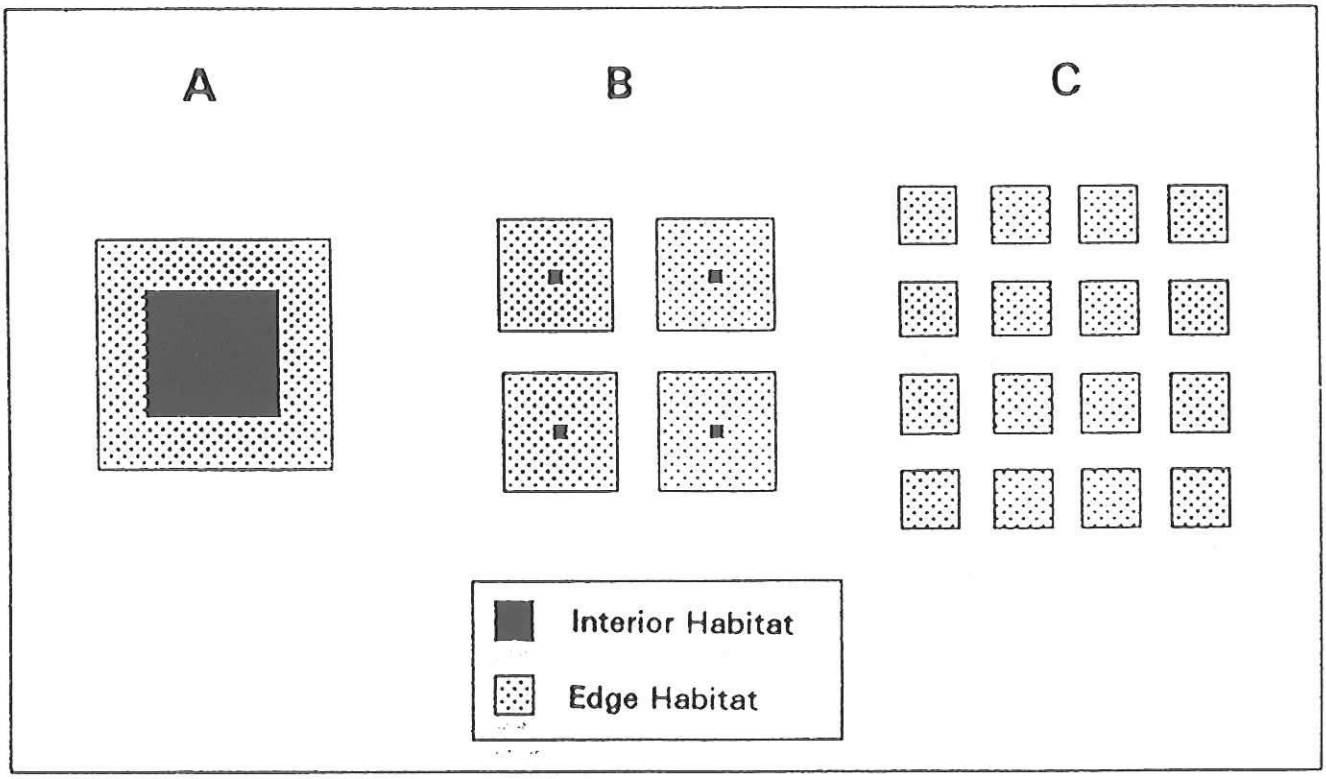
As a network of Major Ecosystems is created, a variety of spatial design parameters need to be considered. Careful attention should be given to maintaining overall landscape connectivity, with particular attention given to retaining adequate areas of interior habitat. Where possible, habitat areas should be linked by corridors of similar habitat to enable species movement.

Figure 3-8 shows one of two important concepts, edge effects, that should be considered during the creation of the Major Ecosystems network. The first design consideration is to maximize the patch size of the habitat area. The larger areas can be critically important to species that require more undisturbed interior space in the habitat, as well as for those species that may be particularly sensitive to area restrictions or disturbances from activities at the edge of the habitat. Habitat protection strategies should be considered on a watershed basis.

Not only is the number and size of habitat patches important, but also the shape and proximity of the patches to one another. Figure 3-9 illustrates the concept by showing that improved habitat values may result from those areas that are larger and closer together, whereas reduced values may result from those areas that are smaller in size and further apart from one another. These types of considerations will vary depending on the type of ecosystem being considered, so the number and shape of the habitat patches will need to be carefully analyzed in each situation.

The policies in OSP 13 and 14 address sustaining important ecosystems and protecting their biodiversity through the creation of a Major Ecosystems network on publicly-owned lands, or lands where the owner has given consent to participate in the program.

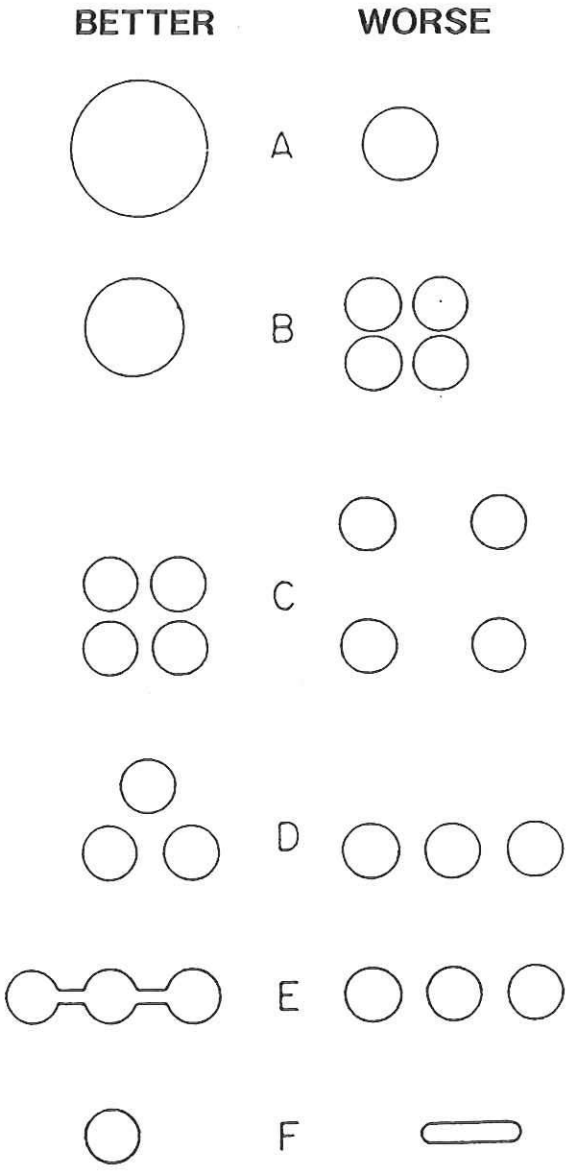
Figure 3-8



The relationship between edge effects and the amount of interior area in a habitat patch is critical. The edge effects can penetrate into the patch a constant distance, regardless of the patch size, potentially resulting in the loss of any unaffected habitat when the patch size becomes too small.

Source: **Peck, Sheila, Landscape Conservation Planning: Preserving Ecosystems in Open Space Networks; Integrated Hardwood Range Management Program, U.C. Cooperative Extension, 1993.**

Figure 3-9



The size and proximity of habitat patches to one another can be critical to affected species. The impacts to species may be less for ecosystem designs on the left than on the right.

Source: Peck, Sheila, Landscape Conservation Planning: Preserving Ecosystems in Open Space Networks; Integrated Hardwood Range Management Program, U.C. Cooperative Extension, 1993.

Wildlife Corridors

The type of habitat that exists between the patches, habitat corridors, will also be critical to the continued success of the ecosystem. If the corridor is going to function for the benefit of the plants and animals, the habitat within the corridor should consist of native vegetation that has been part of the historical landscape, and it must be similar to the habitat found in the patches being connected by the corridors. In contrast, small, isolated areas of habitat are not conducive to sustaining wildlife population over the long term. If the habitat patches illustrated in Figure 3-9 become even more dispersed on the landscape, each patch will become an "island." Over time, the number of different species and the numbers of individual animals will decline in these habitat islands due to inbreeding and competition for food and habitat.

Wildlife corridors between habitat areas are a way to minimize the island effect. Good examples of wildlife corridors are streams and riparian corridors. Wildlife corridors can also be recreated and protected by humans. The protection of corridors could be required in certain circumstances in order to minimize the effects of public and private construction projects on wildlife migration.

The island effect also occurs when habitat areas are surrounded by development. Animals that leave the habitat, or are exposed to more impacts because of the larger edge habitat depicted in Figure 3-8, are more likely to permanently leave the area. If they stay, they are more likely to be killed by such hazards as household pets, pesticides and other human impacts, or succumb to a habitat that cannot provide the necessary life support factors. Without contiguous areas of natural habitat, the animal populations are not replenished from adjacent areas of habitat like they are in larger undeveloped areas, where animals can move freely from one area to another. Therefore, over time, the numbers and diversity of wildlife will decline.

OSP 15 addresses wildlife corridors.

Unique or Sensitive Plant and Animal Habitats

Sustaining a healthy ecosystem where biological diversity is maintained is essential to the survival of unique or sensitive vegetation and wildlife. Unique plant or animal habitat includes the following: habitat of rare, endangered or threatened plant or animal species as classified by state and federal agencies and the California Native Plant Society (CNPS); wetlands and marshes; areas subject to Sensitive Resource Area combining designations in the LUE applied because of unique or sensitive species; and sensitive natural communities as identified in the California Department of Fish and Game Natural Diversity Data Base (such as Valley Oak Woodland, California Bay forest, Central maritime Chaparral, and Pine Bluegrass Grassland). Protection of sensitive natural communities is important because they often contain groups of rare, threatened or endangered species (also see the prior discussion of Ecosystems).

Protecting unique or sensitive plant and animal habitat is also beneficial because it provides:

* A high aesthetic and environmental quality that also contributes to the attractiveness of this county for visitors and the tourism industry they support;

* Opportunities for people to experience and appreciate the natural environment;

* Opportunities for education and scientific research, including the discovery of new medicines and ways to increase agricultural productivity.

Conserving valuable but rapidly diminishing wetland habitats also provides the benefits of filtering pollution, protecting water quality, controlling flooding, and maintaining a high water table. The importance of wetlands has been long recognized in the county general plan. The **Conservation Element** in the Environment Plan contains policies calling for the protection of wetlands, including vernal pools. Wetlands are also recognized at the state and federal levels as area worthy of special consideration. Unfortunately, there is no inventory of the wetland resources in the county, so the identification and protection of these resources most often occurs when a development proposal is submitted on property that may include a wetland. The project review must then try to minimize or eliminate the potential impacts from the proposed development.

Public and private development must help carry out the important objective of maintaining and protecting the unique and sensitive habitats. This plan proposes strategies that would enable development in isolated areas of unique or sensitive vegetation and wildlife as a trade-off to the preservation of larger, more significant areas. By doing so, development can be beneficial to the preservation of important habitats which have been degraded.

Policies OSP 16 and 17 address the protection and maintenance of unique or sensitive plant and animal habitats.

Streams and Riparian Corridors

Streams and their associated riparian vegetation corridor are important open space resources. Maintaining streams and riparian corridors in a natural state offer many benefits, including:

* Conserving important habitat for wildlife such as fish spawning areas and key corridors for wildlife migration and survival, thereby contributing to the overall health of the ecosystems;

* Maintaining the productivity of estuaries downstream;

* Providing ground water recharge;

* Maintaining high aesthetic quality;

* Providing potential recreational opportunities where identified by this or other plans.

Maintaining adequate setbacks between development and streams and the riparian corridor provides the following benefits:

* Provides a needed buffer area to protect natural habitat from direct impacts of development;

* Reduces erosion and sedimentation of the stream;

* Maintains natural channels to carry storm water flow (see Figure 3-10) while reducing the possibility of flooding without the need for costly, unsightly and environmentally damaging stream channelization.

As noted in the previous discussion of ecosystems, wildlife corridors for species movements are critical to the survival of the ecosystem. One of the most important types of corridors is along streams. Waterways not only provide the water on which species depend for life, the riparian vegetation also provide the habitat cover needed to provide for security of movement, possible food sources, and breeding and nesting areas.

The ecological processes operating within a landscape are strongly influenced by the hydrology of the area. If the natural flows of waterways are interrupted, the effects on the ecosystem can be very damaging because the plants and animals are limited in their ability to adapt to changing conditions. Therefore, maintaining or, where necessary, restoring hydrologic patterns is vital for protection of the ecological processes that support species.

Policies OSP 18 and 19 are intended to preserve streams and riparian vegetation. The policies apply to watercourses shown by a solid or broken blue line (commonly called "blue line streams") on the latest U.S. Geological Survey (USGS) quadrangle maps and their associated riparian vegetation.

Natural Area Preserves

On September 1, 1992, the San Luis Obispo County Board of Supervisors adopted the Natural Area Plan, as previously approved by the County Parks and Recreation Commission. The plan contains goals and managements strategies intended to "provide guidelines for the creation of site specific management plans for maintaining the delicate and sensitive biosystems at County operated Natural Area Preserves." A resource management plan is a site specific plan for maintaining the delicate and sensitive ecosystems in County managed Natural Area Preserves.